AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for generating a digital signal representative of ~~the~~ a pairing error between ~~the~~ channels of an analog digital conversion system with time interleaving, said system comprising an analog digital converter on each channel, said method comprising:

~~the determination of the~~determining a spectrum of said digital signal as a function of ~~the~~ a frequency response of the analog digital conversion system with time interleaving to at least one analog calibration signal;

generating a comb signal whose spectrum is composed of frequency lines kFs/N;

wherein Fs is a sampling frequency and N a number of channels of the analog digital conversion system with time interleaving, and whose amplitude is dependent on the frequency response of the analog digital converter.

2. (Cancelled)

3. (Currently Amended) The method for generating a digital signal representative of the pairing error as claimed in claim [[2]]1, wherein the amplitude is dependent on ~~the~~ offset voltages ΔV_k determined on ~~the~~ basis of the frequency response of the analog digital converter.

4. (Currently Amended) The method for generating a digital signal representative of the pairing error as claimed in claim [[2]]1, ~~wherein it comprises the~~further comprising generating an amplitude modulation of the ~~"comb"~~comb signal by ~~the~~ an input signal digitized by the analog digital conversion system so that the amplitude modulation transforms the spectrum of the ~~"comb"~~comb signal as a function of the frequency response of the analog digital converter.

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5. (Currently Amended) The method for generating a digital signal representative of the pairing error as claimed in claim 4, wherein the amplitude is dependent on the deviations in gain ΔG_k determined on the basis of the frequency response of the analog digital converter.

6. (Currently Amended) The method for generating a digital signal representative of the pairing error as claimed in claim [[2]]1, wherein it comprises the further comprising generating an amplitude modulation of the "comb"comb signal by the derivative s'(n) of the an input signal digitized by the conversion system so that the modulation transforms the spectrum of the "comb"comb signal as a function of the frequency response of the analog digital converter.

7. (Currently Amended) The method for generating a digital signal representative of the pairing error as claimed in claim 6, wherein the amplitude is dependent on the sampling clock temporal deviations Δt_k determined on the basis of the frequency response of the analog digital converter.

8. (Currently Amended) The method for generating a digital signal representative of the pairing error as claimed in claim [[2]]1, wherein it comprises the further comprising generating an amplitude modulation of the "comb"comb signal by the result $e_2(n)$ of the a high-pass filtering of the an input signal digitized by the conversion system so that the amplitude modulation transforms the spectrum of the "comb"comb signal as a function of the frequency response of the analog digital converter.

9. (Currently Amended) The method for generating a digital signal representative of the pairing error as claimed in claim 8, wherein the amplitude is dependent on the passband errors $\Delta \omega_k$ determined on the basis of the frequency response of the analog digital converter.

10. (Currently Amended) A method for suppressing the pairing errors between the channels of an analog digital converter, said method comprising the generation of a digital signal representative of the pairing error between the channels of an analog digital converter as claimed in claim 1 and the a subtraction from the a signal at the output of the analog digital converter of said generated digital signal.

11. (Previously Presented)   An analog digital conversion system with time interleaving of sampling frequency Fs comprising N analog digital converters driven by a sampling clock of frequency Fs/N, said system furthermore comprising :

means for generating a digital signal representative of the pairing error as claimed in claim 1 driven by said clock of frequency Fs;

means of subtraction from the output signal of said analog digital converter of the digital signal generated by said generation means.

12. (Currently Amended)   The analog digital conversion system with time interleaving as claimed in claim 11, wherein the generation means comprises:

a device for generating a ~~"comb"~~comb signal driven by said clock of frequency Fs;

an amplitude modulation device connected to the output of said device for generating a ~~"comb"~~comb signal receiving calibration information determined as a function of said frequency response.